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Certainly it is excellent discipline for an author to feel that he must say all that he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Communications.

SOME OF THE MORE RECENT DOCTRINES CONCERNING THE PATHOLOGY OF FEVER.

BY N. S. DAVIS, M. D.

Dr. Horatio C. Wood, in his Toner Lecture, delivered in Washington, January 20, 1875, uses the following language:

"We have found, then, that excessive heat is present in fever; that this excessive heat, when present, not only is able to, but is forced, so to speak, by its own attributes, to produce disturbance of the functions of innervation and circulation, and that the withdrawal of the excessive heat in fever is followed by instantaneous relief of the symptoms of innervation and circulation; surely the conclusion is logically inevitable, that excessive temperature is the *cause* of the other symptoms of fever—that it is the essential portion; *that fever and excessive bodily temperature are synonymous.*"

Again he says: "The proven excessive elimination of carbonic acid in the breath and of solid matters in the urine in fever, the well known emaciation that fever causes, all bear similar witness to the experiments just quoted, so that it must

be received as an axiom, that *the essential part of fever is increased chemical movement throughout the system.*"

From the relations which these two paragraphs bear to each other, we infer that the author means to convey the idea that the "increased chemical movements" in the tissues, which he calls the "*essential part of fever*," are the cause of the "excessive bodily temperature" which in the other paragraph is declared to be synonymous with fever. Assuming these as fundamental propositions, our author proceeds "to determine, if possible, in what way the rise of bodily temperature is produced." After admitting that the increased tissue-change and elevation of temperature constituting fever, "apparently occur everywhere throughout the system," he states as follows: "It is plain that there are only two bonds of union between all portions of the body, two organs or tissues which fuse, as it were, all parts of the system into one; and that any physiological or pathological process which is equally shared by all, must have its origin either in the blood or in the nervous system." And logically asks: "Is fever, then, a *hæmic* disorder, or is it a *neurosis*?"

We will not stop to question the propriety of calling the blood an *organ* or *tissue*, as is fairly implied in the foregoing paragraph, but endeavor to see how far the author succeeds in answering the last question quoted. That the question may be clearly understood, he makes the following explanation: "If the poison carried by the blood into all parts of the body acts upon the various tissues everywhere in such a way as to increase in them tissue-change—or if, upon entering the blood, it excites such changes in that fluid as to cause the blood to incite the tissues everywhere to fever, then that fever may be called, with scientific strictness, *hæmic*. Suppose, however, we have a fever-center in the nervous system, and that irritation of a peripheral nerve is capable of causing fever by affecting that center, such fever would certainly be a *neurosis*. Granting the existence of a "fever-center" of this kind, the laws of life teach us that there must be poisons capable of acting upon it directly so as to produce fever. Such a

fever would certainly be neurotic, although produced through the blood, the vital fluid acting simply as a "common carrier." With this understanding of the terms, certainly clinical proof is at present wanting that the fever of pyæmia, of the exanthematic, or of any so-called blood poisoning is strictly hæmic. It may be due to an action of the poison upon the central nervous system."

Having thus fully stated his premises, Dr. Wood proceeds to show, by quoting the results of experiments performed by others, and adducing an interesting series performed by himself, that there is within the cerebral mass, either in the pons varolii or, at least, above the junction of the pons with the medulla oblongata, a special fever or heat-center—the author using these words as synonymous. Or to use his own language, "there must be in the pons or above it a nerve-centre whose function it is to inhibit or repress the chemical movements of the body, i. e., the production of animal heat." He regards this center as distinct from those influencing circulation and respiration; and as capable of exerting a positively controlling influence over the production of heat in the living body. Both from his direct statement and the general tenor of his lecture, it is to be inferred that Dr. Wood regards the action of all causes capable of inducing fever or excessive bodily temperature, as exerted primarily on the inhibitory chemical or heat-center of the nervous system alluded to above. And hence that all general fevers are neuroses rather than blood diseases. In this respect, however, he is only stating more specifically, or rather tracing to a more definite nervous centre, a pathological doctrine as old as Cullen. Most English and American writers on practical medicine prior to the last twenty-five years, have claimed that the first link in the chain of morbid action constituting fever, was a morbid impression or influence on the nervous system, and that generally of a depressing character. Dr. Southwood Smith, of London, in his once celebrated work on fevers, stated with much precision and emphasis, the order of sequence in the pathological disturbances constituting fever, to

be, 1st, disturbance of innervation; 2d, of circulation and secretion; and 3d, of calorification.

Dr. H. C. Wood, in the recent lecture from which we have so liberally quoted, seems to change the order of Dr. Smith, by making the impression on the inhibitory chemical or heat-regulating nervous center, the cause of the increased heat—calorification; and the latter the cause of the alterations in circulation, secretion, etc. The experiments performed by Dr. Wood and others, prove conclusively enough that when the temperature of the brain of an animal is raised by external application of heat to 111° F. or more, it suspends the functions of the brain, and if not speedily lowered, death follows; and also that a rapid rise of bodily temperature generally follows incisions, punctures, or other injuries of the pons, or its junction with the medulla. But the radical fault which vitiates all his conclusions in reference to the pathology of fevers, is the assumption that bodily heat and fever are synonymous; in other words, that one of the prominent symptoms of a disease is the essential part of the disease itself. This same error is noticeable in a large part of the current literature relating to the pathology and treatment of all the general fevers. So much so, that in looking over the most recent publications relating to practical medicine, the reader would be led to infer that the chief guide to the pathological condition of the patient was the application of the clinical thermometer, and the chief object of the treatment to control the temperature of the body. That both these are very important items, and that they should receive the careful attention of every practitioner, is true. It is only when he allows these to engage his attention so exclusively, that he overlooks other and coincident pathological conditions equally requiring appropriate treatment, that he commits a grave error.

Only a short time since, a case of typhoid fever came under my observation, in the person of a young working man, whose physician had treated him almost exclusively with remedies designed to control the temperature and nourish the

patient; and it was claimed that his temperature had at no time exceeded 105° F., and had generally ranged between 102° F. and 104° F. Yet he died with symptoms of perforation of the bowels during the first half of the sixth week after he began to be sick. The experiments adduced by Dr. Wood simply prove that increasing the bodily temperature by applying external heat acts as an excitant, increasing the frequency of the respiration and circulation; in other words, that free heat increases the general excitability of the structures of the body, a fact abundantly well known before. But the increased excitement caused by heat, is no more identical with any disease properly called fever, than is the increase of temperature, respiration and circulation, following the taking of a full meal.

If Dr. Wood, while applying heat to the heads of his animals, stopped short of destroying life, sufficient application of cold to abstract the excess of heat, speedily restored the animals, and the next day they were as well as ever. But if Drs. Wood, Liebermeister, or any one else applies the cold bath or pack to the *fever* patient whose temperature is 105° or 106° , until this temperature is reduced to the normal standard, it does not stay reduced as in the former case, neither is the patient well the next day. On the contrary, as often as he is removed from the bath or pack, a few hours suffice to bring back his fever heat; not as high perhaps as before, but none the less a fever temperature. And even though the bath be applied from three to six times every day for a week, it simply modifies the symptoms, but does not terminate the fever.

Surely, no more complete proof is needed to show that fever is something more than increased bodily heat, and that the latter is merely one of the important symptoms of the former. We are constrained, therefore, to protest against the doctrine that "fever and excessive bodily temperature are synonymous;" and still more against the prevalent tendency to make the mere measure of temperature the chief guide, both in diagnosis and in the application of remedies. We

cheerfully acknowledge that the cold baths, large doses of quinia, digitalis, etc., technically called the anti-pyrexia treatment of fever, are far more successful and safe than the system previously so much in vogue, of stuffing fever patients with egg-nog, whisky or brandy-punch, wine, and *waiting* or expectancy. But a still more safe and successful clinical method would consist in a recognition of the fact, that all general fevers result from causes acting directly on the properties common to all living structures, disturbing or perverting them in such a way as to involve a simultaneous disturbance of innervation, circulation, secretion, and calorification; and the further fact, that the true indications for treatment are, not merely to control some one prominent symptom, like excessive bodily temperature, but, 1st, as far as practicable to remove or neutralize the efficient exciting cause—the fever poison, if such there be; 2d, to correct as efficiently as possible the disturbances of each of the important functions and processes just named; and 3d, to prevent or control the important local complications that so generally manifest themselves during the progress of protracted cases of fever. A practitioner fully recognizing all these rational indications for the management of fever, need not be deterred, in the least, from applying any one or all of the anti-pyrexia remedies, whenever demanded by too great an elevation of temperature, nor would he ever allow such application for the control of this one symptom, to so engross the field of his mental vision as to cause him, for a moment, to neglect any of the other indications named.

CHICAGO.

A CASE OF SCIATICA—UNILATERAL SWEATING OF THE FACE, HEAD AND NECK.

BY WM. CARSON, M. D.

Sam. W., admitted to the Cincinnati Hospital on December 5, 1874, aged 57; Bavarian; widower; laborer. Mother died of some lung trouble; father died of injuries received by a fall; two sisters died suddenly, at 65 and 62 years of age; another brother died of dysentery, and another was frozen to death. One sister had sciatica for ten years. W. contracted the habit of drinking thirty years ago—drank to excess, and kept it up for five years. Since then has only taken drink once in a while. No venereal history. Has been a little weak in the left hip for fifteen years; for six years has been troubled with pain in different parts of his body at times. In 1870-71 worked in the water steadily for two months, and was in it more or less for nine months. Immediately after this he had some pain in the left hip and leg, which pain has been present more or less ever since. It began above and extended down. In describing the pain the patient points out the origin and distribution of the great sciatic nerve, states that the pain is usually worse from two o'clock A. M. till daylight. It is not so severe at present as it has been.

Present condition. Man five and a half feet high; weight, one hundred and fifty pounds; dark hair and beard, tinged with gray; dark complexion and gray eyes; marked convergent strabismus; leucoma and vascularity of the inner side of the left cornea; the strabismus has existed from childhood; tongue almost clean; teeth fair; appetite good; bowels moved once a week.

Physical Examination. Well formed chest, with good movement; old cup marks over the right side of chest; a few sibilant râles heard over the upper part of right lung in front; heart normal; veins of the legs enlarged and tortuous; muscles of the left hip somewhat atrophied in the gluteal region; not so

much strength in the left limb as in the right; movements of the limb good; sensation appears to be blunted; a few little eruptive spots along the outer and posterior part of the thigh; twitching of the muscles in the gluteal region; tenderness at the point of exit of the sciatic from the pelvis.

A short time after his admission our attention was attracted to the unilateral sweating of the left side of the face and head, of which the following are the principal facts. He had been conscious of it for many years; had noticed that it was more marked after drinks, particularly if they were warm, and that it was sometimes more profuse at the late hours of the night. Objectively, the sweating was limited by the median line of the face and head, the line of the spine of the scapula posteriorly and the clavicle anteriorly. It was found more or less at every examination in a period of several weeks.

The surface temperature was taken several times with a surface thermometer; left temple 96° , right temple 97° , "was sweating a little" at the time; another time, the next day, left temple $98\frac{1}{2}^{\circ}$, right temple 99° . The next day the temperature was 99° on both sides of face. There was not observed any difference within the mouth as to the two sides.

Some time after these notes other observations were: Right cheek, 93° ; left $91\frac{1}{2}^{\circ}$; temples, both 90° ; left hip, over glutei, $91\frac{1}{2}^{\circ}$; over right hip, $89\frac{1}{2}^{\circ}$. Right leg below the knee on the outside 91° ; on the left leg below the knee on the outside, 90° .

No difference in the mobility of the facial muscles of the two sides. No paralysis of muscles anywhere.

Subjectively there was no sense of heat or coldness about the head or face. Once he spoke of a numbness about the head. Often he spoke of having headache, which he did not localize, but which was accompanied with rheumatic pains about the body, "pains in his bones," as he called them; has had cramps in his left foot at night, and while putting on his boot on the left foot the left hand has often felt so dry that he would moisten it to make it more comfortable.

The practical points in this case refer, first, to the treatment of the sciatica; second, to the treatment of the sweating.

As the patient had undergone a considerable variety of treatment for the relief of his suffering, we determined to try the hypodermic injection of chloroform at or near the point of exit of the sciatic nerve (Dr. Bartholow.) We shall give a transcript of the notes taken with reference to this point:

December 6—Ordered hypodermic of chloroform grt. xv., which relieved the pain in a short time.

December 8—Rested pretty well, and feels better to-day. Is free from pain. No hypodermic given.

December 9—Says he rested better last night than he has for two months.

P. M.—Very slight pain this evening.

December 10—Rested well.

P. M.—Some pain in the night—in the right shoulder and knee.

December 11—Slept well. Pain in left thigh and leg as before. Gave hypodermic of chloroform at 9 o'clock P. M.

December 12—Rested well. Went to sleep immediately after taking the hypodermic. Some little pain this morning.

December 13—Rested well after the hypodermic. Some nausea to-day, with headache. At 9 P. M. has some pain; gave hypodermic as usual.

December 14—Did not rest well. Some pain this morning.

P. M.—No pain this evening.

December 15—Some pain for a while.

December 16—The injection was not given last night, but he slept pretty well until 4 o'clock A. M., when he had some pain.

December 18—Received the injection of chloroform last night, but did not sleep well.

The general effect of the hypodermic injection of chloroform was to produce sleep and relief of pain, the latter at first lasted several days. The use of it for two weeks did not produce any permanent relief. The pain generally reappeared on

waking from the sleep which the injection usually produced. There were no very unpleasant general or local effects, though for a few days one abscess was threatening. A subsequent treatment directed to the rheumatic manifestations had some good effect.

The treatment of the unilateral sweating was at first local. Tincture of belladonna was brushed freely over the side affected, but after a fair trial no result was noted. The same negative result with a solution of atropia, two grains to the ounce of water. The internal use of atropia, 1-80 grain, three times daily after two or three days seemed to control the sweating for a time, or as long as the physiological effects of the remedy were apparent. We were unable from accident to use the batteries, and thus test the effect of electric stimulus on the sympathetic of the neck.

The above case is offered as a contribution to the subject of unilateral sweating. The association with the sciatica is a point of considerable interest. Both conditions date back a considerable period; which preceded, or whether either preceded the other, it is impossible to say.

In most cases of unilateral sweating of head or face there has been a local cause, or one acting directly within the range of the nerve distribution, that is disturbed. Tumors of the parotid and in other parts of the neck, aneurismal and other tumors within the thorax are probably the most common associated conditions. None of these causes appears in this case. He has no tumor or local morbid cause that can influence directly or indirectly the sympathetic or any other nerve distribution in this locality. There is nothing in the abdominal cavity that will afford a reflected influence to the parts affected with the local sweating. He has noticed that the amount of hyperidrosis is greater when he is masticating, or when he is using warm food and drinks, a not uncommon circumstance with patients of this kind.

The possible causal relation of the sciatica is one then to be considered. With reference to that as an independent lesion, it may be conjectured that in this case there is an

organic change. First, from the long continuance of the affection, that is, of a persistent and not paroxysmal pain. Second, of a degree of atrophy of glutei muscles, with corresponding fibrillary movements, which atrophy would have been more extended and diffused if it had resulted from the restricted use of muscles. The slight eruptive spots and altered temperature may be adduced as evidence of nerve irritation.

A further probable inference may be justified by the results of both experimental pathology and clinical observation, viz: That the anatomical changes existing, or supposed to exist, in the sciatic nerve have extended to the spinal cord and the central origin of the sciatic, and thereby opened a way for irritation beyond the peripheral distribution of the affected nerve. It may also be suggested that there is a probable anatomical basis for the several phenomena of vaso-motor origin and peripheral nerve irritation apparent in this case, from the following facts developed by recent investigations into the vaso-motor centers, and their relations to the sympathetic and spinal systems:

Dittmar* determined "the lower limit of the vaso-motor center about three m.m. above the point of the calamus scriptorius, and one to one and a half m.m. below the lower border of the tuberculum laterale. The upper limit lies in the vicinity of the fovea anterior, or at about the upper border of the corpus trapezoides. The space so marked out corresponds almost precisely to the territory of origin of the facialis. The mutual relations of the muscles having been thus made out, Dittmar set himself to determine the sectional area of the cord that it covered. The observations of Miescher and Naurocki had already pointed that the centripetal fibres of the sciatic nerve, the irritation of which caused reflectional contraction of the vessels, ran in the lower region of the spinal cord in the lateral column. Dittmar repeated these

* Ueber der Lage des sogenannten Gefäss-Centrums in der Medulla Oblongata 'Ludwig's Arbeiten,' 1874, Band 8, p. 103, Brit. and For. Medico-Chir. Rev., April, 1875, p. 338.

experiments at the level of the third cervical vertebra and found that the destruction of the anterior and posterior columns, as well as of the grey substance of the cord even at that height did not interfere with exaltation of the blood pressure or irritation of the sciatic. It follows, therefore, that not only the centripetal fibres of the sciatic, the excitation of which causes increased blood pressure, but also the vaso-motor nerves themselves must run in the lateral columns of the cord."

We have in this extract first, the anatomical fact explicitly stated of a close relation between the line of direction and travel of the centripetal fibres of the sciatic and the vaso-motor fibres in the cord, and the fact of the area of the vaso-motor center itself corresponding to the territory of origin of the facial nerve. Incidentally there is mention of the influence of section or irritation of the sciatic nerve upon vascular tension in extensive and remote parts of the system.

In this special department of reflex vaso-motor phenomena we have much that is of interest. For facts of this kind we are indebted to Vulpian, in the most recent work on the "Physiology and Pathology" of the vaso-motor apparatus.*

"If, for example, on a dog the central extremity of a divided sciatic nerve is excited, not only the vessels of the opposite limb contract, but most of the vessels of the body do. This result is constant, and can be easily verified by the hæmydynamometer put in communication with one of the carotids. This apparatus indicates a notable increase of blood pressure, each time that the central end of the sciatic nerve is excited. The same phenomena are also manifested under the influence of irritation of the trigeminus, and of nearly all sensitive nerves, as well as of the posterior roots of the spinal nerves.

Also p. 238, "if one of the sciatic nerves is exposed, divided, and its central end electrized with a very strong current of induction, the general rose tint of the inferior surface of the tongue pales in a decided manner; the small

*Leçon sur l'appareil vaso-moteur, Paris, 1875. †Loc-cit p. 237.

superficial vessels are quite visibly contracted, are effaced even upon certain points, and can become as it were moniliform. At the same time the blood which is there contained becomes darker. It can be demonstrated that this contraction of vessels is produced through the medium of the cervical sympathetic."

Another instance, p. 212, but of vaso-dilating effect, is "that if the central end of one of the sciatic nerves of a curarized rabbit is divided there is seen a dilatation of the vessels of the two ears, greater in the side corresponding to the section and excitation than in the other. Here the dilating action is limited to some vessels, among others to those of the ears, and is not produced in the rest of the body.

On the dog if the extremity of the ear is cut a feeble flow of blood is produced, but if then one of the sciatic nerves is excited the blood flow is increased to the extent of producing an abundant hemorrhage."

On page 251, "when the anterior cervico-auricular nerve is divided on a rabbit there is observed very often a relative contraction, more or less permanent of the part quite above the principal artery of the ear—the electrization of the central end of one of the sciatic nerves, makes this part of the artery, as well as the rest of it, to dilate."

The vaso-constrictive and vaso-dilating effects are said to be transient, yet Vulpian, p. 255, remarks: "It is probable on the contrary, that a pathological excitation bearing upon the peripheral extremities of sensitive or centripetal fibres, can produce a continued irritation of these fibres, and give place to secondary morbid phenomena, more or less persistent."

Botken* says: "A whole series of clinical observations can finally convince us that a long continued irritation can produce a persistent dilatation of vessels of the skin on the corresponding side, whereby the skin of this side becomes warmer and redder—the temporal artery of this side not seldom

* Berliner Klinisch Wochenschrift, February and March, 1875.

becomes more visible and tortuous, and also the corresponding radial artery becomes harder and more compact, and resisting than on the other side."

Brown-Sequard's well-known experiments on Guinea pigs may be referred to here as proving the permanence of such results, at remote points of the system, as well as showing the experimental evidence in favor of the view that the regions in the area of the cervical sympathetic system may become affected by causes of disease acting remotely.

Section of the sciatic nerves in Guinea pigs produces, after a certain period of time, epileptic attacks, which could be developed by irritation of certain regions of the face and neck. The epileptogenic zone is even more extended after section of the sciatic, than after section of a lateral half of the spinal cord†. Other interesting effects, more pertinent to the case in hand, are the increased amount of lacteal secretion in animals who were in the active period of lacteal secretion, the gland corresponding to the side of the section, and a diminution of the amount in the opposite gland, and such an alteration of the skin of the epileptogenic zone as favored the accumulation there especially of parasites, and also a change in the hair covering those parts. Very often also an increased secretion of nasal mucus was observed on the same side.‡

The nerves which supply this zone in the Guinea pig are according to Brown-Sequard§ the fifth pair, particularly the infra-orbital and auriculo-temporal branches and the posterior branches of the second, third and fourth cervical pairs.

Looking at the anatomy of the cervical sympathetic we can see what close relations through the spinal system this latter holds with the region of skin, which exhibits these remarkable changes under the influences of the section of the sciatic. The anatomical basis and connection would appear

*Archives de Physiologie Tome 11, 1869, p. 210.

†Loc-cit, p. 432.

‡Loc-cit, p. 428.

§Loc-cit, p. 434.

still more certain, when we recall the course of the centripetal fibres of the sciatic, and their relations to the superior spinal and sympathetic and vaso-motor nerve regions, as indicated in the extract above given of the views of Dittmar. The clinical evidence of the connections between sciatica and affections within the range of innervation from the upper parts of the sympathetic and spinal system, does not include any case exactly similar to the one we report. Brown-Sequard* refers to the association of sciatica and the epileptogenic zone in the case of a man reported by Dr. G. Dieulafoy.

Rosenthal† mentions a case of Ischias connected with diplopia and paralysis of ocular muscles, and also another connected with long continued masturbation, which habit implies frequently recurring excitement and exhaustion of the genito-spinal centers; while we have references to two cases of unilateral sweating of the face and head in two insane persons who had been for a long time masturbators.

Budget‡ located the genito-spinal centers about the fourth lumbar vertebra and the fifth cervical, where is a small ganglion with connections with another about the fourth lumbar: irritation of either ganglion would produce the same effects on genital organs as the other. Cases of sciatic epilepsy are reported in the human subject, but we are not aware of any observations as to the possible remote vaso-motor effects of the sciatic irritations in such cases.

In the therapeutics of sciatica there is a fact which may be mentioned in this connection. It is the successful application of the actual cautery to the ear for its cure. This is a treatment adopted by Malgaigne and successfully used by Dr. Comegys, of this city, in such cases.

A German practitioner has given us instances of similar cases by one of his teachers in Germany.

A study of this case and of the several classes of facts anatomical, physiological, experimental and clinical thus

*Archives de Physiologie, Vol. 2, p. 503.

†Die Nerven Krankheiten, p. 538.

‡London Medical Record, August 16, 1875.

grouped about it, shows a wide range of functional and organic connections in sciatica. Such connections are not peculiar to the sciatic alone.

We have not attempted to traverse these trails with the utmost minuteness.

We have also to leave unconsidered the temperature effects connected with sciatica in its reflected action.

CINCINNATI.

MALARIAL WHIMS.

BY JOSEPH G. ROGERS, M. D.

The occurrence of an extraordinary endemic of malarial diseases during the past autumn in this part of Southern Indiana, presenting almost every phase which this class of maladies is capable of exhibiting, leads me to devote this article to a consideration of some of the manifestations which were observable:

Since the first settlement of this region, as nearly as I can learn from the oldest inhabitants, no season has brought with it so much and such manifold miasmatic trouble. "Fifty years ago," writes our reverend and respected associate, Dr. Cornett, "our autumnal diseases were principally dysentery, intermittent and remittent fevers. These latter at times proved fatal; sometimes suddenly by congestion, sometimes by inflammation of the brain or other important organs, and sometimes by degenerating into a low, typhoid condition." Within the last two decades ague had become comparatively rare, however; remittent fever was almost universally recovered from, and true typhoid fever seemed to have become their permanent successor as the autumnal scourge. Two years ago ague again become rife in certain localities; last year still more general, but the autumn of 1875 will always be marked in our local medical history with a double header: *Malaria*.

Returning from Europe in the latter part of August I found myself in the beginning of the fight, and for two months, together with my *confrères*, found little time for anything else but the diligent waging of war against this insidious enemy.

In November Jack Frost finally, however, scoured the field and "drove him." Throwing metaphor (which is unscientific) aside, I will state that within sixty days I treated one hundred and thirty-five cases of malarial diseases, of which I have the clinical history. This occurred in a *clientelle* which would in ordinary years furnish perhaps a half dozen cases of mild remittent or ague in the same time, easily cured by a few doses of any anti-periodic. The causation of this unusual endemic is attributable to the extraordinary rain fall of July, and the drought and heat of the succeeding months. The majority of cases occurred in the neighborhood of low-lying grounds, previously covered by overflowing streams of water, which on subsiding left a large amount of vegetable *débris* in a state of decomposition. Many, however, were found on adjacent heights, and even on the hills four hundred feet above the general level. The locality most exempt was the dry, paved and hard-trodden heart of our little city; and to outsiders, let me say, that that remained, and always will, a secure citadel against all miasmatic invasion. Of the number mentioned only twenty-five were cases of well-defined ague; one hundred and six remittent, the rest presented miscellaneous and masked conditions.

A consideration of the table of ague cases affords the following facts:

No age is exempt—the ages of patients ranging from six months to eighty-four years. Males are more susceptible than females—fifteen males and ten females being attacked.

The temperament has some little influence on susceptibility—8, sanguine; 7, nervous; 5, bilious; 4, lymphatic. Two cases were negroes. Three cases were quotidian, twenty-three tertian. Eight cases relapsed, invariably from careless pursuance of treatment. Six were chronic cases, under domestic or irregular treatment. One case, eighty-four years old,

presented a comatose condition with second chill, in which I first saw him and which was mistaken by laymen for apoplexy. This patient, under proper anti-periodic treatment had no further manifestations, and was well in three days, requiring no more treatment. Three cases were under two years of age; two of these had convulsions. One case, previously a confirmed epileptic, suffered an eclamptic attack with each paroxysm. One chronic case after profuse accidental purgation exhibited ataxic symptoms, which continued for three weeks, associated with a very remarkable pallor of the skin. One case was followed by remittent fever one week after cessation of the ague. One case was complicated by dysentery. The average duration of treatment was fourteen days; longest five weeks, shortest three days. Infants recovered without relapse after four or five days medication. The acute adult cases got generally 15 grs. of sulphate of quinia suspended in syr. acaciæ, with a flavor of tr. of recent orange peel, in two early morning doses for four or six days. A few got the sulphate of cinchonidia, in same dose, which proved itself a good substitute for the quinia salt. After this period the dose was gradually lessened in most of the cases for a week or ten days, and then followed by a pill (three times a day) of quiniæ sulph. gr. ii.; pil. ferri carb. gr. iv.; acidi arseniosi one-thirtieth of a grain, continued in some instances for three weeks. In the relapsing cases an increase of quinia was given and the above pill continued if in use at time of relapse. If patient had suspended all treatment, it was recommenced as if for an acute case. Three of the chronic cases were thoroughly cured by the pill alone. In four instances the comp. tinct. cinchona was used as a final corroborant; in one the comp. infusion of gentian, with tartrate of iron and potash. Several cases got lactopeptine during convalescence where gastric debility was manifest, and the results were decided. All were completely cured without any residual glandular enlargements. In no case was any mercurial resorted to, although I have no doubt that cathartics of that

class may sometimes be serviceable—though not indispensable.

Considering the one hundred and six cases of remittent, I find that thirty were of a simple uncomplicated type, speedily recovering under treatment without any residual troubles. The average duration of treatment in this class was two weeks, the fever disappearing about the fourth day. Of the remainder, five exhibited more or less coma; ten persistent delirium. Four children had convulsions at inception of disease. One case had hiccough, five neuralgia, two sciatic, one cervico-brachial, two trigeminal. Four had pharyngitis, one keratitis, two bronchitis, one hepatic abscess, and one aphthæ. One case was complicated by menorrhagia, not intermittent. Twelve cases were attended by intense general abdominal congestion. Nine cases exhibited dysentery of a severe type. Three had decided enlargement of the liver and spleen. One engorgement of right lumbar and inguinal glands, causing œdema of right leg, disappearing without suppurative inflammation.

One case came to a fatal issue from peritonitis, following intestinal obstruction in the second week. Another seen in consultation had hepatic abscess, as a sequel of a remittent, beginning four weeks before, no peritonitis of a general character—asthenic death.

A child two and a half months old died on the fourth day with slight eclampsia. The mother of this child became comatose on the second day of illness, and remained so until death—on the fourteenth day. In this case large purpuric spots appeared on the last day. The father of the lady just mentioned was attacked about the last of August, and succumbed only after an illness of three months. This case was especially interesting, as presenting a train of complications, some of which have been already referred to. Some details will perhaps be acceptable: Seen in consultation on the fourth week, with a serious previous history, the patient was found with high evening temperature, with delirium, great prostration, anorexia and nausea; also, inflamed inguinal

glands, œdema of right leg, and slight abdominal tenderness, but no tympanites. Had previously got quinia, the mineral acids and other appropriate treatment. Gave sulphate of quinia, 30 grs., every morning, wine and selters water, and forced nourishment, principally buttermilk. Hot fomentations to groin. Improved for ten days; sat in a chair an hour or two; glandular inflammation lessened, but œdema not. Then came a violent chill and consecutive fever. Continued treatment with digitalis. Paroxysms continued irregularly, notwithstanding quinia for a week, then disappeared. During this week aphthæ appearing, gave sulphites of soda and magnesia. Improvement decided for the week following under continued quinia, stimulants and nourishment: œdema of leg also disappeared entirely. At this time after the use of a very small dose of an effervescent saline, laxative dysentery commenced; continued quinia, ten grains daily, and gave opium and ipecac, which was well borne but failed to control the congestion entirely. There was little pain, only occasional fever and delirium; the tongue red and glazed. During the following four weeks, essayed various opiate and astringent mixtures, sometimes with and sometimes without the quinia. Found best results from salicin, ergot, opium and pepsin. Aphthæ reappeared and continued, hiccough also, but was controlled after a week, using for the latter with best effect, a chloroform and ether mixture internally. During the last week of life there was but little pain or dysentery, and no fever, but a rapidly increasing prostration of vital force notwithstanding sufficient food and nourishment. Patient would probably have recovered, but for dysentery, with consequent ulceration at a time when vitality had been far undermined by previous conditions, both moral as well as physical; five others of the family being ill at the same time, two of whom died before he did. The three others of these cases referred to slowly recovered. The unusual virulence of the morbid cause in this family may, I think, be explained by the fact that very extensive excavations and gradings had been made in the immediate vicinity in grounds

which had been the site of a large military hospital and afterwards the receptacle for much filth of animal origin, thus affording a mixed miasm.

The treatment pursued in the simple remittents before mentioned was the same in general as used in the intermittent cases, the anti-periodic being given in doses of sixteen grains daily in the morning remission usually, but sometimes in two grain doses every three or four hours, day and night, without regard to remission. A mercurial purgative was sometimes given at the beginning of a recent case. In many cases the fever subsided after forty-eight hours; in all of this class by the fourth day. After this the sulphate of quinia or of cinchonidia was gradually lessened for a few days, after which the pill of iron, quinia and arsenic was used throughout convalescence.

Of the more serious class, those in which visceral congestion was extreme, particularly in the abdomen, thirty grains daily of the anti-periodic—always quinia—were given in the morning, and full cinchonism maintained until both fever and congestion subsided. One case got forty grains daily for three days; distressing cinchonism was induced, but a very serious dysentery, pre-existent for a week, was meantime completely throttled. All cases complicated by dysentery, excepting the above, got ipecacuanha and opium, and ice water injections, in addition to quinia. This course was generally successful. If the disorder was persistent, as it was in several instances, going on to ulceration, ergot, opium and salicin was found to be a satisfactory combination—superior to the usual course of astringents, etc. The comatose cases got ice or ice-water to head, with potassium bromide if pupil was small, conjunctiva red. Active delirium was managed by the same means. When the pupil was large, and symptoms of a typhoid nature existed, morphia and alcohol were resorted to with advantage; counter-irritation on spine in all cases of cerebral complication—convulsions indicated potassium bromide. The neuralgic conditions, which were sometimes secondary, were met by the pill of iron, quinia

and arsenic, and morphia or extract of hemp. Electricity was used in only one case, when there was disposition to occasional recurrence. The effect was immediately curative, pain ceasing under the current, which was from a very smooth Faradic instrument. The only case of keratitis was well in one week under the use of atropia. In bronchitis, senega and hyoscyamus were given. Among the masked cases, was one of intermittent dysentery tertian in type, with no chill or fever appreciable by the patient. Another presented remitting spinal congestion as the sole symptom; another pure cervico-brachial neuralgia.

MADISON, IND.

A CASE OF EXCISION OF THE ELBOW-JOINT.

BY L. S. MCMURTRY, M. D.

(*Read before the Central, Ky., Medical Association, January 19, 1876.*)

That department of our art known as *conservative surgery* has undoubtedly achieved its greatest triumph in the resection of joints. Certain allusions were made by Hippocrates, Celsus, and Paulus Ægineta to the excision of the ends of fractured bones and of diseased joints; but well-authenticated instances lead us to believe that excisional surgery had its birth at a much later date.

Toward the close of the last century Park, of Liverpool, and the Moreaus, senior and junior, in France, excised joints with success, but failed to elicit approval of the operation from either the British or French profession. It was only about forty years since that, for the most part through the influence and example of Mr. Syme, the general attention of the profession of Great Britain was attracted to the operation, and excision gained their favor.

In this department of surgery American operators have displayed marked skill and ability, and during our late civil war the excision of bones and joints yielded brilliant successes.

The operation of excision is now resorted to in many instances where amputation was formerly the rule, and by this procedure valuable limbs are preserved, which were formerly sacrificed. The advantages of resection over amputation need not be detailed here, for they are obvious.

Of all the joints in the body, probably no one promises better results from excision than does that of the elbow. This joint was first resected by the elder Moreau, and the name of Syme, who introduced this operation into Great Britain, has become inseparably connected with the history of excision of joints in general, and of this joint particularly. His celebrated case of elbow excision in a man who for nine years after the operation discharged the duties of a railway guard, is familiar to every one who has investigated this subject. The movements of the new elbow-joint must have been exceptionally good, while to discharge such duties much strength was required. Upon the death of the subject of Mr. Syme's operation the joint was dissected, and the humerus and ulna found united by ligamentous attachments, and the radius was so polished off as to play upon the humerus and ulna with a material resembling cartilage interposed; in short the natural joint was imitated.

A similar condition of the parts to that just detailed we believe to exist in the case to which we will now direct attention.

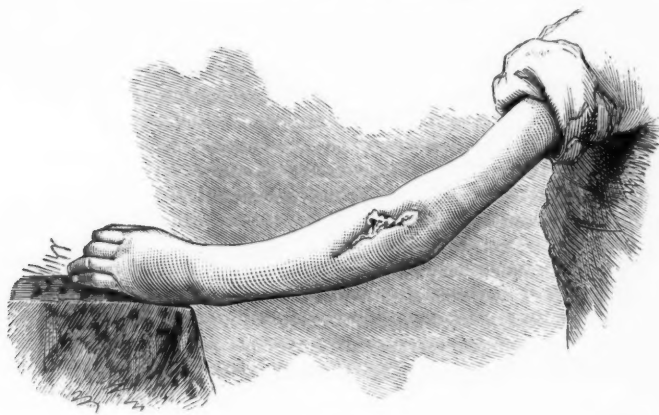
James Z., aet. 20 years, first came under our observation early in the fall of 1874, having suffered with disease of the left elbow for more than two years previously. He stated that while the arm was inflamed from vaccination he received a fall, which bruised the limb in the vicinity of the elbow. This injury was at once followed by severe inflammation of the elbow-joint which compelled him to apply to a physician for relief. The inflammation resulted in free suppuration which

necessitated an opening for the escape of matter. This condition continued, and January 1, 1873, the patient applied to the late Dr. John D. Jackson for treatment. At this time the elbow was greatly swollen, discharging freely, and motion impaired. Dr. Jackson made two additional openings for the escape of the abundant discharge, and prescribed a tonic course.

In February, 1873, the movements of the joint were entirely lost, and it was evident that his general health was becoming seriously impaired by the severe drain upon his system. His skillful attendant proposed at that time the operation for excision, and he rejected it. A tonic course was continued, and he was urged to observe every hygienic measure for the promotion of his health.

In September, 1874, we first examined the patient with Dr. Jackson, he having again presented himself for advice.

At that time there was no motion whatever in the diseased joint; five long sinuses, discharging ichorous and purulent matter, led to the bones involved; the muscles of the entire limb were wasted by long inactivity, and the patient was being reduced by hectic fever. By this time it had become evident to the patient and his friends that something must be done, or he would rapidly succumb to these inroads upon his health and strength. The operation of excision was again proposed, its dangers and the increased risk by long delay were made plain, and happily the patient determined to avail himself of an operation. Preparation for the operation was at once instituted by using every available means to improve his general condition. The appearance of the arm at that time is represented in Fig. 1.



(Fig. 1.)

On October 29, 1874, the operation was performed by Dr. Jackson, assisted by the writer; Dr. A. B. Nelson administering chloroform, and valuable assistance being rendered by Drs. A. R. McKee and W. B. Harlan. Esmarch's apparatus was applied and rendered the operation bloodless, thus enabling the operator to utilize the sense of sight as well as touch in determining the extent of the diseased process, in avoiding nerves, and to act more securely in every respect.

The plan of operation pursued was that first recommended by Dr. Hodges, of Boston, and which has been more prominently brought before the profession and its advantages demonstrated by Mr. C. F. Maunder, of London. It had previously been customary to make an H shaped incision over the posterior aspect of the elbow, or a single longitudinal and transverse incision. But for the complete success of the operation it is all-important that no transverse incision should be made, for by division of the tendon of the triceps muscle, or by disturbing the relations of that tendon to the anconeus muscle and the fascia, extension is impaired or destroyed, and the utility of the arm lessened thereby.

In this case a straight incision about four inches in length was made over the posterior aspect of the elbow, passing over the olecranon.

The soft parts had become infiltrated and so matted to the bones that it was difficult to distinguish anatomical relations. The ulnar nerve, however, was held aside, the bones denuded and the forearm forcibly flexed so as to protrude the articular extremities of the bones. The periosteum was preserved whenever possible, and the saw applied when the bones had been thoroughly cleared. Anchylosis of the joint was complete, and the bones had been extensively injured by the carious process. The humerus was divided above its condyles, and also the affected extremities of the radius and ulna. The diseased bone and numerous spiculæ having been removed, the wound was thoroughly cleansed. After all oozing had ceased the extremities of the incision were united by silk sutures, the wound packed loosely with lint, and a large central opening left for drainage. Cold water dressings were then applied, and the limb placed on a pillow in a semi-flexed position. The patient reacted promptly, took ten drops of laudanum, and was doing quite well when visited four hours afterward.

From this time until its termination the management of the case was conducted by the writer.

On the morning following the operation we found the patient comfortable, temperature 99.5° F.; pulse 100; had rested well during the night without an anodyne; appetite good.

The wound was thoroughly cleansed by means of the syringe and warm water, several clots being removed and cold water dressings again applied. Motion and sensation were found to be good in all the fingers. Quinia and iron were ordered to be given thrice daily, with wine and liberal nutritious diet.

On the following day the pulse was 100; temperature 99° F.; wound suppurating, and patient in good general condition. The bowels had moved. The wound having been thoroughly cleansed, cold water dressing renewed.

On the evening of this day (the second after the operation) the patient exhibited considerable febrile movement; the

pulse was 118, and full; temperature 102° F.; the face flushed; the eyes bright, and pain in affected arm.

On removing the dressings suppuration was found to be quite free and the edges of the incision appeared red and swollen. The wound was thoroughly cleansed with tepid water, the syringe being used constantly for forty minutes, and fresh dressings applied as before. By cleansing the wound thoroughly in this manner the pulse was reduced from 118 to 106 per minute, and the patient rendered comfortable. He rested well during the night, and in the morning the wound was treated as on the previous day.

On November 2 (the fourth day after the operation) the pulse was 100; temperature 99° F., and the patient cheerful, comfortable, and having a good appetite. The wound was suppurating freely, the ends of the divided bones were being rapidly covered by granulations. The edges had united where the sutures were placed, and these were removed. The arm was placed in a wooden trough with a hinge at the elbow and fashioned to the limb by soft padding. The water dressings were continued, and the wound cleansed thoroughly thrice daily. The beneficial influence of the warm douche as a preventive of pyæmia, etc., was demonstrated each time by a reduction in the pulse of several beats per minute.

The general condition of the patient improved from this time, while the wound steadily healed. The granulations were healthy and vigorous, and in a short time the central opening left for drainage was closed. Two weeks after the operation a grooved splint, fitted to the limb and provided with a hinge at the elbow, was applied and fixed with a bandage. By means of the hinge the angle of the forearm with the arm was changed daily, and these movements were more frequently made from day to day.

Toward the close of the fourth week passive motion was begun, and more energetically made as could be borne by the limb. The patient was encouraged to use the arm when it was being exercised in this way. The sinuses continued to discharge quite freely for some months, and closed very

slowly. Finally they were dilated by means of laminaria tents, and applications of a strong solution of sulphate of copper and tincture of iodine made throughout their entire tracts. As the indurated walls of these sinuses were melted down, union began at the bottom and all finally closed.

Some two months after the operation the splint was dispensed with entirely, and the arm supported only by the bandage, which was also laid aside after a few weeks.

The muscles of the limb, so long inactive on account of the ankylosis of the elbow-joint and uselessness of the arm, had become greatly atrophied, and for the same reason the patient had, to a marked extent, lost control of the entire limb. For the improvement of these conditions an electric current was passed through the limb twice daily, and at each time of dressing the arm was subjected to energetic, and often apparently violent, passive motion, with frictions and the cold douche. The patient was continually urged to exercise the limb, and though quite awkward at first, its movements were gradually regained, and the valuable member so long inactive again came under control. This course was pursued regularly for nine months, and the result as exhibited by the patient fully compensates all concerned for the long and tedious process which required much care, attention and patience.

At the present time the patient has all the movements of the arm, forearm and hand—pronation, supination, flexion and *active extension*. The circumference of the arm and forearm have been increased fully an inch since the operation, and the gain in power is in proportion. He easily reaches his mouth with the hand, ties his cravat, and declares that the limb is almost as useful as previous to the beginning of the trouble. He uses the limb daily in pursuing his occupation as a printer. The improvement in the patient's general health is wonderful, and has been progressive from the day of the operation. At the time of the operation his weight was only seventy-six pounds, while at the present time it is quite 125. He has increased several inches in height, and proportionately in other respects.

We think it can be safely claimed that to the operation detailed here he is indebted for his present vigorous health and a valuable and useful limb.

The appearance of the arm at the present time is represented in Fig. 2.



(Fig. 2.)

This case, besides adding its testimony to the value of excision of the elbow-joint, has some features of peculiar interest.

In the first place it demonstrates that neither an unfavorable constitutional nor local condition, unless extreme, should deprive a patient of the advantages of resection of the elbow.

In the case just detailed the patient was in a debilitated and cachectic condition, and improved steadily from the time of operation, and at the present time is in more robust health

than ever before in his life. The local conditions also in this case were by no means favorable for operative procedures. The tissues surrounding the joint, for some distance above and below, were infiltrated with the discharges, perforated with sinuses, and the vitality of the parts greatly reduced in consequence. But from the results of some cases of elbow excision which have been recorded, it is doubtful if any condition of the soft parts can utterly preclude the operation. Had the patient availed himself of the operation when first proposed, *i. e.* one year previous to its performance, undoubtedly the recovery would have been more prompt.

The condition of the bone is a point of greater gravity in relation to the operation. If there be tubercular matter in the bone, if it be softened from diffuse inflammation and suppuration in a great part of its extent, and if long sinuses containing pus run through it, excision should not be performed. For these reasons it is often necessary and proper after beginning a resection to convert the operation into an amputation.

There is one point in the operation to which we desire to direct special attention. We refer to the superiority of the linear incision as practiced in this case over other methods. It will be observed that our patient has the power of active extension of the forearm, whereas had a transverse incision been made, the limb would most probably have been deprived of this movement. To Mr. C. F. Maunder, of the London Hospital, is due the credit of bringing this method prominently before the profession, and skillfully demonstrating its value. In an article on this subject recently published by Mr. Maunder,* the following letter occurs, which was addressed to Mr. M. by a gentleman whose elbow was excised after this method by that surgeon six years ago :

DEAR MAUNDER: You will be glad to learn that my arm has won the champion billiard cue in the late match here; also that I took honors in quoits. I send you a paper per post. I have left a clause in my small will that my arm shall be preserved and sent to you for examination and dissection after my death. I believe it to be the finest arm in the world without a joint.

Yours truly,

J. N.

*The Lancet, November 13, 1875.

As remarked by this accomplished surgeon the best test of an operation is the result after several years. The case here reported in detail and the one just alluded to, are important demonstrations of the superiority of the linear incision in excision of the elbow-joint.

DANVILLE, KY.

THE TREATMENT OF ORCHITIS.

BY GEORGE N. MONETTE, M. D.

Physician to St. Anna's Asylum, New Orleans.

The following is the treatment which I have found uniformly successful in the different varieties of orchitis—syphilitic, gonorrhœal, and traumatic: In the first variety, where the body of the testicle and the epididymis are involved, the disease readily yields to specific medication. I usually give one-sixteenth of a grain of corrosive sublimate, with ten grains of iodide of potassium, every four hours, and use locally cantharidal vesication and the suspensory bandage. If pain in the course of the cord is severe, morphia hyperdermically or by the mouth. A marked reduction in the size of the inflamed organ will frequently be observed in from twelve to twenty hours, and the improvement is generally permanent.

In gonorrhœal orchitis, I trust entirely to cantharidal vesication; the benefit is generally evident within two days at farthest. As in the syphilitic variety, morphia may be given if the pain demands it.

Traumatic orchitis, which is comparatively rare, should be treated with cold water dressing until the swelling subsides somewhat, and then a cantharidal blister.

In using a blister, I seldom permit complete vesication to occur, because of the severity of the suffering, and difficulty

in dressing the blistered surface; but if the induration be persistent, then the entire organ should be completely blistered, using afterward castor oil dressing. After the vesication has healed, or even sometimes before, the bandage is used, first applying lint or charpie saturated with castor oil. After the bandage is carefully and completely applied, on account of cleanliness envelop the whole with oil silk.

I think this plan of treatment much superior to any other which I have had the opportunity of observing, and it is believed it will prove quite as satisfactory in the practice of others as it has in mine.

NEW ORLEANS.

Reviews.

A Text-Book of Human Physiology: Designed for the use of Practitioners and Students of Medicine. By AUSTIN FLINT, Jr., M. D., Prof. of Physiology and Physiological Anatomy in the Bellevue Hospital Medical College, New York, etc., etc. New York: D. Appleton & Co. 1876.

We took occasion to invite the attention of our readers to the treatise of Prof. Flint on physiology as the successive volumes were issued from the press, and now take much pleasure in calling their attention to this stately volume, in which the substance of the larger work is comprised. The author found it necessary thus to condense his labors in order to render them available either by students or practitioners, and, after all his efforts at compression, his work remains one of serious proportions for a text-book. It forms a volume of nearly a thousand royal octavo pages, in rather small type; but we must say that we do not perceive how it could have been made smaller without the omission of matter interesting to every physician. Take it altogether, we have no hesitation in pronouncing it a work of signal ability. It evinces patient research, sound judgment, and untiring industry. The illustrations are beautiful, and will prove a great aid to the student. In point of completeness, we doubt whether any manual on physiology, in any language, is superior to it; and, in one respect, we are inclined to place it at the head of all our treatises on physiology: we refer to the absence of speculation, and the fidelity with which Dr. Flint adheres to facts. His work is made up of the ascertained truths of physiology.

L. P. Y.

Phthisis: Its Morbid Anatomy, Etiology, Symptomatic Events and Complications, Fatality and Prognosis, Treatment and Physical Diagnosis, in a Series of Clinical Studies. By AUSTIN FLINT, M. D., Professor of the Principles and Practice of Medicine, and of Clinical Medicine, in the Bellevue Hospital Medical College, etc., etc. Philadelphia: Henry C. Lea. 1875.

We have here another contribution to our medical literature on the diseases of the chest, with which Dr. Flint has favored the profession as the result of his clinical researches. Like all the previous works of the author, it is founded upon what he himself has observed, and is, therefore, original and eminently trustworthy. On every point relating to phthisis, the reader may expect to find in this volume the latest and soundest views and the most exact information, communicated in a clear, concise style. The work is sure of a hearty welcome from the profession.

L. P. Y.

Cyclopædia of the Practice of Medicine: Edited by Dr. H. VON ZIEMSEN, Professor of Clinical Medicine in Munich; vol v: Diseases of the Respiratory Organs. New York: William Wood & Co. 1875.

The contributors to this volume of the Cyclopædia of Practical Medicine are Professors Juergensen, Hertz, Ruehle, and Rindfleisch, who have here carefully brought together the accumulated observations of the profession on the diseases of the respiratory organs. This volume, we take great pleasure in stating, is fully up to its predecessors in all the qualities that have secured the Cyclopædia the high commendation of the press everywhere; and there can no longer remain a doubt that, when completed, the work, in itself, will form a complete library on the practice of medicine. A very full index to the matters contained is appended to this volume, which will prove a great convenience to the reader. In all that pertains to its mechanism—its paper, type and binding—the volume is unexceptionable. We would be glad to know that this work is finding its way to the libraries of all our practitioners of medicine.

L. P. Y.

On Poisons in Relation to Medical Jurisprudence and Medicine: By ALFRED SWAYNE TAYLOR, M. D., F. R. S., etc., etc. Philadelphia: Henry C. Lea. 1875.

A work which has reached its third edition in our country, and passed through as many at home, stands in no need of approval by the periodical press. The one before us is confessedly the ablest of all the treatises on poisons extant in our language, and is to be found in the libraries of most of our leading physicians. The present edition has been thoroughly revised, and is fully abreast with the modern discoveries in toxicology.

L. P. Y.

Transactions of the Indiana State Medical Society. 1875.

This volume of one hundred and eighty-five pages, comes to us neatly bound in cloth, tinted paper, and clear type, and, excepting a few errors in proof-reading, is very creditable to the State Society in its make-up. It opens with the address by the President, Dr. R. E. Haughton, of Richmond, the subject being "*Life, Mind, Force or Vital Dynamics.*"

Undoubtedly the address evinces industry, research and reflection, but we question the propriety of occupying the time of a State Medical Society and the space in her published transactions with what, to us, seems like nearly everything else that has been written on this subject, abstruse and unprofitable.

Next is a paper by Dr. G. W. H. Kemper, of Muncie; but, as this was noticed in the last number of *The American Practitioner*, no further reference to it is now necessary.

Dr. Kemper's paper is followed by one on "Puerperal Convulsions," by Dr. Martin, of Greenfield, and the report of a case of such convulsions, the patient recovering under hypodermic morphia, two and a half grains in five hours, by Dr. Harvey, of Plainfield. Dr. Martin's paper strongly upheld blood-letting. The presentation of this paper and report was

followed by an animated discussion which exhibited, more especially on the part of the older members of the profession, a strong faith in venesection as the most important of therapeutic means in puerperal convulsion.

Dr. Harvey, of Plainfield, presented a brief paper on "Fibroid and Fibro-cystic Tumors," and Dr. Stevens, of Indianapolis, one on "State Boards of Health." It is earnestly hoped that Indiana, and every other State that has not already such an institution, will soon have this imperative want supplied. Dr. Stevens also continues his contributions to the "Medical and Surgical History of the State," and places on record many interesting facts.

Dr. Gillem, of Rockville, in a brief paper, speaks strongly in favor of chloral in asthma. Dr. Beck, of Fort Wayne, advocates the use of iodide of potassium, in heroic doses, in rheumatism and syphilis, claiming that if this medicine be given in doses of thirty to eighty grains, every three hours, the cure is certain. Some will believe that Dr. Beck's facts only prove that these diseases are self-limited, and that human beings will bear very large doses of iodide of potassium, and few can be quite as sanguine as the doctor in regard to the efficacy of his plan of treatment. However, that court of final appeal, general professional experience, must decide this therapeutic question. The next paper in the Transactions is a report on "Trichinosis," by Dr. George Sutton, of Aurora. This is very interesting, and adds another to the many laurels of this honored veteran and most faithful worker in the profession. Dr. Sutton mentions six cases of trichinosis occurring under his observation, and, from a faithful study of the subject, draws the following conclusions:

"First. That the cases of trichinosis that came under our observation in the city of Aurora, Ind., were produced from eating uncooked pork in the form of smoked sausage—a mode of eating this meat common to our German population.

"Second. That we reiterate what is already known, that it is only by thoroughly cooking the meat that the vitality of trichinae can be destroyed, and that eating smoked or dried pork uncooked,

in any form, or the partially cooked ham used in the form of sandwiches, common in eating-houses, is attended with danger.

"Third. That from microscopic examination of pork killed in southeastern Indiana, we have found from three to sixteen per cent. of the hogs affected with trichinæ—the number of hogs diseased varying greatly in different localities.

"Fourth. That over five millions of hogs are slaughtered and packed in the western states, not including those which are put up for family use by the farmers; that if four per cent. of this pork is diseased, which we believe to be a low estimate, we have two hundred and twenty-one thousand four hundred and eighty-four diseased hogs put annually upon the market; or, at an average of two hundred pounds to the hog, forty-four millions two hundred and ninety-six thousand eight hundred pounds of diseased meat, every ounce of which, under favorable circumstances, is capable of producing disease.

"Fifth. That from the cases of trichinosis that came under our observation, and the post mortem examinations, and the effect upon the dog that was fed on the diseased meat, we have come to the conclusion that ninety per cent. of disease produced from eating trichinous pork appears either as gastro-enteritis, or as a diarrhœa or dysentery, and not more than ten per cent. as the fully developed form of trichinosis in which the muscular system becomes affected.

"Sixth. That as diarrhœa, dysentery and enteritis rank high as causes of mortality in the United States—these diseases causing thirty-one thousand one hundred and fifty-three deaths in 1870, as shown by the last census reports—and as we have seen that a large amount of trichinous pork, capable of producing these diseases, is amongst the principal articles of food in our country, we think it more than probable that trichinæ have a much greater influence in the etiology of this class of diseases than has been recognized by the profession.

"Seventh. That it is highly probable, when the fact becomes more generally known, that so large a per cent. of pork is swarming with trichinæ capable of producing disease, it may have an effect upon the use of this meat, and consequently affect the sale, to some extent, of one of the principal articles of commerce in the west.

"Eighth. That as pork is the principal animal food of a large portion of the population of the United States, the subject is of great importance—important to the agriculturist; important to the sanitarian, as affecting the health of the community; important to the physician; and not only important, but highly interesting as a subject of investigation to the zoologist.

"Ninth. That as it is stated in one of our medical text-books, 'hog cholera' and trichinosis are supposed to be the same diseases, we have ascertained beyond all doubt, by careful microscopical examinations of the flesh of hogs that had died with unmistakable symptoms of hog cholera, that the two diseases are entirely distinct."

The volume closes with the "minutes," list of members, and the Constitution adopted at this session of the Society. The Society will hereafter be a representative body, composed of delegates from the various county societies. We believe that this change was wise, and that the Society has now entered upon a new era of honor and usefulness.

Clinic of the Month.

EXCISION OF THE ANKLE.—In the report of a case, *Lancet*, December 18th, by Mr. James F. West, of Queen's Hospital, Birmingham, in which this operation was successfully done, the operator makes the following observations:

"Resection of the ankle, or, in fact, of any other joint, is of course not justifiable until attempts have been made to remedy the joint-mischief by all the means at our disposal. Rest; immobilisation; counter-irritation, by blisters, iodine, or by the actual cautery; and, lastly, free incision into the joint and removal, if possible, of any fragments of loose, necrosed bone—must each, in succession, have been resorted to; while at the same time the patient's general condition has been to the utmost improved by fresh air, good living, and such tonics as iron, quinine, and cod-liver oil.

"Still, after the adoption of all these measures, suppuration in and about the joint, pulpy degeneration of synovial membrane, ulceration of cartilage, and caries of the cancellous structure of the bones, will in some cases continue, and then arises the question: Shall the leg be amputated by Syme's or Pirogoff's method; or shall the patient have the chance first offered to him of keeping his foot, even although this will necessitate a somewhat difficult and tedious operation and a protracted convalescence?

"I entertain a strong opinion that by adopting Ollier's (of Lyons) mode of subperiosteal resection, the future history of excision of the ankle will be far more satisfactory than the past has been. Experience has also shown that partial resections had better be given up, and that it is better to excise the

entire joint than to limit the operation to the removal of the obviously diseased portions of it. Attention to the following measures during the after-treatment will also add greatly to the number of successful cases:—1. Early and complete immobilisation of the limb. 2. The use of the anterior iron-bracketed splint, by means of which, as after resections of the knee, the leg can be suspended in a Salter's swing, and the lateral openings in the joint dressed without much disturbance of the parts. Lastly, the employment of drainage-tubes, passed from one side of the ankle to the other, by which pus and carious débris may be removed, and through which the wound may be daily washed out by some weak disinfecting solution, as carbolic acid or Condy's fluid.

"The originator of resections, as of so many things that still hold good in surgery, was Celsus, as we learn from this passage: 'Ideo quod excedit, abscindendum est.' But the first to apply this principle to the ankle was an English provincial surgeon, Hey, of Leeds, who in 1766 resected the lower ends of the tibia and fibula for compound dislocation; and since that time resection of the ankle has frequently been performed under similar circumstances with such good results that few would question the propriety of performing resection for compound dislocation of that joint rather than of at once recommending amputation of the leg. Hey's success led to the adoption of the operation for chronic articular disease by Moreau, and in 1792 he first removed the lower ends of tibia and fibula for disease."

A POSSIBLE CAUSE OF TRANSVERSE POSITION.—In the *Annales de Gynécologie*, October, a case of shoulder-presentation is given, where the mal-position was corrected by external manipulations, and presentation of the face occurred, the infant being born alive. This patient, during her pregnancy, passed entire days at work, with the upper part of the abdomen pressing against the edge of a bench. In another case of shoulder-presentation observed by the same reporter, the subject was a flower girl, who, during her pregnancy, carried

her basket of flowers so that there was a constant pressure from above upon the uterus. These facts certainly are exceedingly interesting, and furnish a satisfactory explanation of the mal-position in each case.

THE INFLUENCE OF THE HABITUAL USE OF ALCOHOLIC LIQUORS UPON THE DURATION OF LIFE.—The following table was recently presented in one of Dr. Richardson's lectures on *Industrial Pathology*, delivered before the Society of Arts, London :

Years of Life.							
	15-25	25-35	35-45	45-55	55-65	65-75	75
All Classes...	739.....	985.....	1'305.....	1'853.....	3'215.....	6'076.....	16'584
Laborers	513.....	872.....	1'080.....	1'507.....	2'734	6 060.....	18'256
Blacksmiths...	366.....	918.....	1'124.....	1'869.....	3'225.....	7'138.....	19'254
Engine driv'rs and Railway servants.....	712.....	1'121	1'497.....	2'151.....	4'059.....	7'092.....	20'543
Publicans.....	957.....	1'449.....	2'044.....	2.859.....	4 303.....	7'465.....	21'792

It is seen from this table that the men who are engaged in the dispensing of alcoholic drinks, and who are, almost by necessity, led to indulgence in such drinks in small and frequently repeated libations, are from the beginning to the end of their careers specially stricken down with disease, the fruit of their intemperance.

PARACENTESIS OF THE PERICARDIUM.—In a report made to the Paris Academy of Medicine, by M. H. Roger, *Archives Générales*, December, 1875, it is stated that this operation is seldom indicated; it is always difficult; it is incomplete, for it can rarely be repeated several times, and assisted by washing out the cavity as in thoracentesis; but in certain circumstances, as in large effusions either of acute or of chronic rheumatism, and in other effusions not evidently of tuberculous origin, it is indicated: it is only exceptionally a curative but a palliative means—it is always a bold intervention, but necessity sometimes justifies and dictates it. In fifty-four cases there were many deaths, and but one complete cure.

It has sometimes happened that thoracentesis has been made instead of paracentesis of the pericardium, and *vice versa*. Sometimes the heart has been wounded, even when capillary instruments were used, but these punctures have never been injurious.

In operating use the aspirator and capillary trocars. The point for the operation is in the fifth intercostal space, between the nipple and the sternum, a little nearer the former than the latter.

THE TREATMENT OF TYPHOID FEVER.—The Medical Record, January 10th, has an exceedingly interesting letter on the above subject by Dr. Edward Warren, late Surgeon-General of the Egyptian army, now residing in Paris. From the letter we extract the following for its remarkable correspondence with the views expressed by that veteran, Dr. N. S. Davis, in his contribution to this number of the Practitioner:

"There is undoubtedly a strong disposition at present to run away with *pyrexia*—to confound it with the disease of which it is a symptom, and to regard its arrest or abatement as the only indication worthy the consideration of the physician. To many minds there is no danger to be feared, save that which the *thermometer* signals and illustrates; and no remedies to be evoked, except such as *cold water* supplies or typifies. In a word, the views which the 'German school' has promulgated relative to the disastrous influences exerted upon the organism of an elevated temperature, have been so enthusiastically adopted by the profession as to obscure the true pathology of typhoid fever, and to inspire a blind subserviency to the therapeutical dogmas recorded by Ziemssen *et id genus omne*.

"Without entering into any formal argument to demonstrate the fallacy of these ultra ideas, I will simply oppose to them a few practical statements, respecting the reliability and the logic of which there can be no discussion.

"1. Peyer's patches sometimes ulcerate even to the point of intestinal perforation, without the concomitant occurrence of any special elevation of temperature to indicate the existence of a typhoid infection.

"2. The degree of heat developed in typhoid fever, and the virulence of the disease itself, do not sustain a necessary and invariable relation.

"3. Patients constantly succumb after the temperature has reduced itself, or has been reduced by remedies.

"However important it may be in certain cases to subdue the *pyrexia*, the indication which presents itself in this respect should be met intelligently and guardedly. The physician should remember that the *heat*, with which he has to deal, is *not really the disease* to be combated, and that the remedies demanded are 'heroic,' and require the nicest discrimination in their employment. He should distinctly realize that, in laboring to reduce the temperature, he is only attacking *one* of the obstacles which interfere with the operation or exhaust the energy of that 'principle of conservation' which the system requires, in order that it may be carried safely through the trying ordeal of the typhoid infection. And he should most rigidly guard against that fallacious infatuation which satisfies itself with a crusade against *pyrexia*, whilst it ignores the paramount obligations to strengthen the failing powers, to renew the wasting tissues, to utilize the hampered digestive processes, to limit the disastrous ulcerative action, to eliminate the contaminating products of the crude and unhealthy metamorphosis, and to assail every symptom which, by obstructing functions, or developing complications, or combining with essential phenomena, adds to the patient's discomfort or diminishes his chances of recovery."

PIGMENTARY DEPOSITS IN THE BRAIN.—Dr. William A. Hammond, "Transactions of the American Neurological Society," makes the following statements:

"First. That as a consequence of malarial poisoning, the pigment of the blood undergoes a change in appearance and

form, and that the alteration is effected in the spleen, leading to hypertrophy of this organ.

"Second. That this pigment may enter the general circulation from the spleen, either in a free condition or in pigment-holding cells, and that it may be deposited in the cerebral blood-vessels, or pass through their coats.

"Third. That these deposits may give rise to various symptoms, indicating derangement of the nervous system.

"Fourth. That arsenic appears to have the power of, in a way at present unknown, so altering the character of the pigmentary deposits as to facilitate their removal and to cause the disappearance of the symptoms to which they give rise.

"Fifth. That we may have, during the life of the individual, ocular demonstration of these facts by the presence of pigment in the fundus of the eye, as revealed by the ophthalmoscope."

TREATMENT OF ENLARGED LYMPHATIC GLANDS.—J. Warrington Haward, F. R. C. S., in a paper in the *British and Foreign Medico-Chirurgical Review*, January, 1867, thus speaks of the treatment of lymphatic glandular swellings:

"The simple enlargements depending upon neighboring irritation will, if left alone, subside upon the removal of their cause. I say, if left alone, for if the skin over them is irritated by the application of iodine, poultices, or blisters, they may be provoked, as one so often sees, into still further enlargement, or even suppuration. Nothing in therapeutics is more curious than the way in which some practitioners paint tincture of iodine over every imaginable kind of swelling; to some minds the mere existence of a tumor, seems at once to suggest the local application of iodine, and to these, painting with iodine seems their refuge in all cases of doubtful diagnosis, as though changing the color of the skin were supposed to affect the character of the growth beneath it. Unfortunately the staining is not the only harm done by such

applications, for they inflame the skin and thus keep up or increase the glandular irritation for the cure of which they are used, or render the parts unfit, for a time, for necessary operative treatment. An acute swelling of a single lymphatic gland may be sometimes rapidly cured by puncture. A narrow thin knife should be thrust into the center of the gland and withdrawn, and the part then covered with a piece of cotton wool, the pain and swelling at once quickly subside.

"Single caseous or cretaceous glands, in healthy persons, should be removed if their position does not render the operation dangerous; when superficial, they are easily turned out, and the scar left is very slight. Gland-swellings in connection with diseased joints are of course an indication for rest. I have seen one case of hip disease, in which there was reason to believe that the joint affection was the result of suppuration spreading from the inguinal glands.

"The scrofulous enlargements will be chiefly benefited by the constitutional treatment of the disease of which they are part; and for this, nothing is to be compared to the influence of sea air and cod liver oil. Small doses of iodide of potassium, in combination with preparations of iron, may be advantageously given with the oil. This is far more efficacious than the syrup of the iodide of iron, which I believe to be an entirely useless preparation. The local treatment, as long as the glands are only swollen and tender, should consist in simply protecting them from cold, pressure, or other irritation, which is best done by covering the part with cotton wool. When, however, matter forms, or the caseous material softens and liquefies, a very small puncture should be made through the skin, and the contents of the abscess gently squeezed out, pressure being made by a pad of lint on each side of the opening. The puncture may require to be occasionally reopened with a probe; but by this means, adopted early, the integrity of the skin is preserved, and the unsightly scars and puckerings often seen in such cases are prevented. It is, moreover, very desirable, when possible, to get rid of the caseous products of inflammation, for they are otherwise lia-

ble to be the seat of constantly recurring suppuration, or may perhaps be the origin of a future tuberculosis.

"The treatment of Hodgkin's disease is a much more difficult question. Dr. Hodgkin himself said that concerning the treatment of this affection, either curative or palliative, he had nothing to offer. We must still confess ourselves in much the same position. Certainly no medicine that has hitherto been used, has seemed to have the slightest effect either in retarding or arresting the progress of the disease. I have injected large quantities of tincture of iodine into the tumors, but without producing any benefit; parts of the tumor into which the injection was made underwent inflammation and caseation, but the disease progressed steadily to its fatal termination.

"It is to be noted, however, that although in the majority of cases the morbid growth eventually ceases to be local, and becomes disseminated, yet in many this dissemination does not occur until late in the disease; and in some, the growth proves fatal by its pressure upon, and invasion of, important parts, without any secondary growth being found anywhere in the body. Wherefore it seems reasonable to ask whether any benefit would accrue from the early removal of the primary tumor, when such an operation is possible, and whether, by so doing, the dissemination of the disease might be prevented or delayed.

"I have had one opportunity of adopting this mode of treatment, but not at so early a period as I could have wished. The subject was a girl, four years old, in whom the mass of diseased glands occupied the whole of the left side of the neck, extending from the trachea in front to within an inch of the spinous processes behind, and from the mastoid process above, to the clavicle below. The growth measured six inches transversely, and four and a half vertically. It was lobulated, elastic, and moderately firm, and moveable upon the parts beneath; the skin covering it was natural. No enlarged glands could be felt anywhere else, and there was no increase in the number of white globules in the blood,

neither could any visceral disease be detected. The child was very pale, but not emaciated. I removed all the discoverable diseased glands in two operations; at the first, clearing the anterior triangle of the neck, at the second the posterior triangle. The child recovered with great rapidity from the operation; she speedily gained flesh and color, and was evidently much benefited by the removal of the growth. The improvement was, however, but temporary; for, after about six weeks, some enlarged glands again appeared in front of the left sternomastoid, and subsequently in other parts of the body, and the child eventually died from general dissemination of the disease. It was notable, however, that no fresh growth took place in the posterior triangle of the neck, where the absence of important structures permitted a very complete dissection to be made, and it seems very probable that I may have left some glands in the early stage of disease, among the large vessels in the anterior triangle, where their small size may have prevented their discovery without a dangerous amount of dissection. The improvement in the general condition of the child was, however, sufficient to encourage me to repeat the operation, should I have the opportunity, at an earlier period of the disease."*

*For a detailed account of this case, see a paper read before the Clinical Society December 10, 1875.

Notes and Queries.

THE DELIRIUM OF OPERATORS.—Not the least interesting article in a recent number of the *Annales de Gynécologie*, December, 1875, is a lecture by Professor Guéniot upon the *delirium of operators*, a disorder which he first had described in 1864. This delirium Guéniot defines as a more or less brief mental aberration of the surgeon, which hurries him to producing upon his patient lesions almost always grave, and most frequently mortal. He states that the young physician is peculiarly liable to this delirium, and that it occurs more frequently in obstetrical than in other practice. He cites from Baudelocque a case in illustration of this delirium, and one from Mauriceau also; and in this latter, although no names are mentioned in the original narrative, the operator so apparently cruel and ignorant in his practice, and so bitterly condemned by Mauriceau, was none other than Viardel, one of the ablest and most illustrious obstetricians of his day. He then gives several other instances, most of which he was personally cognizant of, where men of acknowledged ability and skill, indeed some of distinction, had committed most terrible errors in obstetric operations, sacrificing child and mother, one or both, needlessly and cruelly.

In one instance, where three physicians were concerned in a tedious labor, no pelvic deformity whatever, the child taken away by piece-meal, the mother's organs terribly torn, and she dying in their hands, one of the three operators afterward reproached himself most bitterly, and said, "We were no longer masters of our actions; we had lost our reason; we were madmen."

The delirium of operators presents two successive phases, viz., that of vertigo and that of confirmed delirium. In the former the operator shows some disturbance of perception, nervous tremor, obscurity and even confusion of thought; his memory is affected, and his words do not correspond exactly to the thought. He has cephalic congestion, joined with a sort of fatigue or depression; the face has a dusky flush, he has general perspiration, palpitation of the heart, and manifests a want of precision in his movements. Thus far there is no great danger; fear, hesitation seems to rule his actions; it is the condition of the medical student making his first venesection, or rather that of the young doctor in his first application of the forceps.

Now this, according to circumstances and according to the temperament of the physician, may undergo no further development, or it may be the prelude to a most dangerous affection. Let some unforeseen difficulty arise, some impediment present itself to the anxious operator, his fear of failure increases, he is irritable; and if he suspects among those around the patient distrust, if he thinks his pride wounded, his reputation endangered, these conditions alone may be enough to cause an attack of delirium. This delirium represents the disease in its highest and most terrible expression. The intellectual and moral faculties are perverted; the accoucheur is beside himself; and, impatient to end the labor, no longer master of himself, he acts with violence, sometimes even with fury. The very sight of blood, instead of calming, increases his excitement; and hence it may be said, without great exaggeration, that the surgeon, though ordinarily characterized by gentleness and patience, becomes like the soldier intoxicated with blood who engages furiously in the strife.

Soon a calm comes, by degrees the delirium is dissipated, and the operator, recognizing his errors, bitterly reproaches himself, and deplores his persistence in the management of a case which he had become incapable of conducting to a favorable termination. Sometimes he desires a consultation, hoping that the evil he has done may be remedied, or he

hastens from the dying patient under the influence of fear and shame, perhaps also to escape the bitter reproaches of the family.

Such are some of the salient passages in this most interesting lecture, which we wish we had space to publish in full. Many of our readers, some of them we know, can recall illustrations of this delirium of operators—illustrations that they have heard of, if not witnessed.

In this country, where suits for malpractice, which we fear are sometimes encouraged, if not instigated, by doctors for the gratification of the basest malevolence, we wonder that some ingenious lawyer does not adduce, in behalf of the defendants in such suits, the fact of this delirium! Emotional insanity has played an important part in criminal jurisprudence, frequently saving from the penitentiary or the gallows; and why may not the delirium of operators furnish as valid a plea in civil trials where matters of pecuniary damages are to be settled! The suggestion is made for the benefit of some lawyer ambitious of urging a new defense, or of some unfortunate doctor needing such defense.

LAWS OF THE CHRISTIAN CHURCH AS TO WOMEN DURING MENSTRUATION.—The Mosaic law, Leviticus, chap. xv, as to woman during her menstrual flow, is very complete, plain and positive; but it was not until reading in Moreau,* some years since, that a Council of Nice forbade her at such a time to enter the church, we found that this matter had been considered at all by authorities in the Christian church.

There is not in the decisions of either of the great Councils of Nice any such decision as Moreau mentions, so that if made at all, it was by a local rather than a general council, and quite possibly he was altogether mistaken in his assertion. A learned theological friend, from whom we sought information on this point, states there is, however, a so-called Canon of Dionysius of Alexandria (circ. ann. 247), on this subject. It is not a canon in the sense of a church law

* *Histoire Naturelle de la Femme.* Paris, 1803.

enacted by a church council; but it is a decision of Dionysius, *which is to-day "good law"* in the Oriental churches, and is here given:

"*S. Dionys. Can. I.* Concerning women in menstruation, and whether they ought to enter the house of God while they are in that condition, it seems to me superfluous to inquire; for I suppose that no faithful and devout woman will presume, while in that state, either to approach the Holy Table, or to touch the Body and Blood of Christ. The woman who had an issue of blood twelve years touched him not, but only the hem of his garment; for it is not blameworthy to pray that one may receive somewhat, or that one may be remembered of the Lord, or to ask that we may receive help, but whosoever is unclean in soul or body, shall be forbidden to approach the Holy [Mysteries], and the Holy of Holies."

On the other hand Gregory the Great, to whom the same question was referred by St. Augustine, decides directly against Dionysius, and that on the ground of the same case cited by Dionysius. Gregory thus writes, 597, to Augustine:

* "Woman must not be forbidden to come into the church whilst she has her monthly courses; because the superfluity of nature can not be imputed to her as a crime; and it is not just that she should be refused admittance into the church for that which she suffers against her will. For we know that the woman who had the issue of blood, humbly approaching behind our Lord's back, touched the hem of his garment, and her distemper immediately departed from her," etc.

Gregory, too, in the same letter, very positively forbade sexual intercourse during lactation. "The husband is not to approach her until the infant born be weaned."

CHOLERA IN SYRIA.—The Medical Times and Gazette, of December 18, 1875, contains the following:

"The epidemic of cholera in Syria still continues, though happily in a much less degree; but according to the latest reports, it threatens to extend into Mesopotamia. At Aleppo

* Bede's Ecclesiastical History, p. 47. Bohn's Antiquarian Library.

it appears to be over, as only one case occurred there between November 10 and 16, and none had been registered from the 13th to the 20th of that month. At Orfah, Cintab, and Bisnada, there have been no cases since November 12; and at Lattakia, as well as in all the other seaports, it is stated that the public health is excellent. Kusada, a village about three hours from Lattakia, is the only place in Syria where cholera is still prevalent; twenty-eight cases and fifteen deaths have been registered here from the 9th to the 19th ult. On the other hand, this disease has broken out in a virulent form at a place called Insin Mossul, and unless the most stringent precautions be taken, it is feared that it will spread to other parts of the province. There were on an average from seven to eight cases a day at Insin Mossul, from October 14 to November 4, and since the latter date the number of attacks had increased to about twenty daily."

We have from time to time presented our readers with the cholera bulletins from Syria. From them it will be seen that the disease is gradually working its way to both the Mediterranean and Black Seas. The disease is again repeating its history; and if, from month to month, the notes of its advance, as announced in European journals, are closely watched, it will be found *that the next outbreak of cholera in North America can be traced to the present epidemic in Syria, as that can be traced to India.*

YOUNG MOTHERS.—In August, 1866, we reported in the Cincinnati Journal of Medicine, the case of a girl living in Shelby county, Ind., who commenced menstruating at three years and a half. In a communication in the Cincinnati Medical News, January, 1876, from a physician in Shelbyville, we learn that when thirteen years and eleven months old, this girl gave birth to a mature, healthy male child. A few days since we attended a married girl in confinement, who was just fifteen years old. The labor was very tedious, lasting forty-eight hours, and had to be terminated by forceps; the child, male, weighing upward of ten pounds, and the mother, are both doing well.

DR. JAMES BELL, for many years a prominent physician of Terre Haute, Ind., died last month. At a meeting of the physicians of Terre Haute, called together by his death, Dr. Ezra Read made a brief address, after which the usual resolutions of regret and sympathy were adopted. From Dr. Read's address we abstract the following:

"For nearly a quarter of a century Dr. Bell had been actively identified with the profession in this county, and for industry and fidelity to the sick and afflicted he had no superiors, few equals. He lived and died an honorable and honored citizen, and a good physician. From all professional jealousies and strifes, he carefully stood aloof, following industriously the path of usefulness and quietude, so congenial to his organization. He was skilled in professional courtesy, and was unsparing of it in his daily relations with those of like calling. In all his fraternal relations he was scrupulously exact in his own manner, and without arrogance or ostentation accorded proper and respectful attention to the opinions of his associates."

FEELING AN APPEARANCE.—Naturally one would be as little inclined to believe that an odor could be heard, or a sound seen, as that he should expect to feel an appearance. But the following extract from the last volume of the Edinburgh Obstetrical Society's Transactions, proves that at least one doctor has faith in the last. Dr. Duncanson, who, in addition to several other titles, is a F. R. C. P. E., reports a case of acute inversion of the uterus, and in the course of the report remarks, p. 41 of the Transactions, vol. III, "To see that the uterus was properly contracted whilst the placenta was being removed with the right hand, the left was placed on the abdomen where the uterus is generally felt like a foetal head. The appearance of the foetal head was not felt," etc. To expect to find the uterus on the abdomen is good, but to feel an appearance is ever so much better.

Obituary.

MEMOIR OF JOHN D. JACKSON, M. D.

The remarkable abilities, the admirable moral qualities, the great professional attainments and reputation, and the honored and useful life of the late Dr. Jackson, claim more than a passing notice in periodical medical literature. But in commencing this brief sketch of his life and character, it may be alleged by some that the subject never made any original investigation enlarging and enriching medical science; but, as has been remarked by one of the great leaders of our profession in this country, originality is many-sided, and may exhibit itself in a great variety of ways. Originality is as truly exhibited by the physician in the application of principles to practice, in the confirmation of theories advanced, and in the presentation and illustration in another light of facts previously made known, as by the historian in the interpretation and appreciation of events already recorded.

The subject of these remarks afforded an example of the medical scholar and practitioner in rare combination, and the incidents of his life offer a valuable lesson to the younger members of the profession which he honored by his devoted labors. His career demonstrates what can be accomplished by an active, vigorous intellect, and a heart filled with generous impulses, together with untiring diligence and determined effort, all devoted to a noble work, even when removed from the influence of those surroundings which inspire the best efforts of medical men.

John Davies Jackson was born in Danville, Kentucky, on December 12th, 1834, and died at that place on December 8th, 1875, not completing the forty-first year of his life. He was the eldest child of John and Margaret Jackson, both natives of Kentucky. His father, two brothers and three sisters, are living at the present time, but his mother died in his early youth. He grew up in the

place of his nativity, which was also the scene of his labors during his professional life.

He received his education at Centre College, Danville, Ky., from which institution he received the degree of A. B. in 1854. Although the assertion that the child is father of the man can not be applied generally, there can be no question but that in many instances the tastes and inclinations of the boy foreshadow the life and character of the man. It was to a great extent illustrated in this case; Dr. Jackson was by nature a student. The quick perception, close application, attentive observation and thorough investigation, with wonderfully retentive memory, which characterized his professional career, were manifested to a marked degree in acquiring his classical education.

He once remarked to the writer that had he consulted his tastes alone, he would have devoted himself to the art of painting. Indeed his talent in this direction was quite marked, and during his entire life he evinced high appreciation of artistic skill, and could readily detect the master hand in painting, statuary and engraving. However, he happily determined to devote himself to the study of medicine, and very soon after his graduation at Centre College he entered the office of his uncle, Dr. Thos. W. Jackson, of Danville, as a pupil. He was an exceedingly modest and unassuming young man, and devoted himself with assiduity to his studies. He went into society very seldom, and unless thrown in his company frequently, few could know the distinguished traits of his mind and character as manifested at that time.

In the fall of 1854 he matriculated in the medical department of the University of Louisville, which was the leading medical school of the West and South. The names of Gross, Flint, Palmer, Miller, Rogers, Vandell and Smith graced the faculty roll of this institution at that time. After spending the interval in laborious study in the office of his uncle, he attended a course at the Medical Department of the University of Pennsylvania, where he graduated in 1857.

By his training in college and his early acquired studious habits, he had learned how to study. The value of the power indicated by this expression is known to all teachers and students of medicine. At the very beginning he acquired an intense fondness for his professional studies, and this, with his quick perception, inde-

fatigable industry, and retentive memory, enabled him to enter upon the practice of medicine familiar with the principles which were to guide his action, and well informed as to the state of medical and surgical science at that day.

Immediately upon graduating he returned to his native place and opened an office. He entered upon his professional career with a distinct plan, high purposes and great ambition. From the outset to the close of practical life he despised the artful and obsequious methods too often resorted to, even at the present day, for obtaining employment. An essay written by him some years later shows that the facilities for observing "the Black Arts in Medicine" were by no means wanting. He has often remarked to the writer that he determined to deserve success, and never to seek it in a manner unbecoming the dignity and honor of his profession.

Even in his native city the circle of his acquaintance was quite limited. With studious habits, modest demeanor, and retiring disposition, he was slow to extend his acquaintance beyond that acquired in youth, and his social visits were very few indeed. He so constantly kept in view his determination to avoid courting popular favor as a means of securing business, that his bearing was frequently misinterpreted, and thought haughty and distant. Practice came very slowly, but the time of waiting was by no means lost. Just so soon as his ability was discovered his services were sought. Being always at his post in his office, the accidents and emergencies requiring immediate attention, in the absence of other physicians, furnished opportunities to demonstrate his superior skill. The probationary years, so often spent by young physicians in bewailing their misfortunes, were utilized by labor, which had much to do with his success in after life. With astonishing energy and unflagging perseverance he pursued his studies, devoting himself to his text books and the few periodicals which he then received. He steadily worked his way into practice, doing everything with care and attention, and when the great civil war broke out, he had established a good and rapidly increasing practice.

Dr. Jackson never took an active part in politics, seldom talked upon political subjects, and would not engage in political controversies. His opinions upon all subjects were formed deliberately after carefully surveying the ground, and when once formed they were decided. Having adopted a course, he was steadfast and

unwavering, and pursued it with fidelity to the end. He determined to cast his lot with the South, and leaving home, friends, his growing practice, he entered the Confederate army as a surgeon. During the first years of his service he was with the Army of the Tennessee, and for the remainder of the time with the Army of Northern Virginia. His rank was that of a surgeon, and he was in the field, discharging active and laborious duty during the whole time, excepting a short period when in hospital from a severe illness, brought on by exposure and fatigue. He received his parole at Appomattox, when the closing scene of that long and bloody drama was enacted.

As a military surgeon he served with honor and distinction. His labors here were actuated by patriotism and a high sense of duty. He declined an offer of high promotion, preferring to remain in the field with his command. During a great portion of the time he acted in the capacity of brigade and division surgeon, and his duties were discharged with signal energy and ability. His valuable report upon vaccination among the troops, which was published by order of the surgeon-general at Richmond and issued to the medical corps, will doubtless be remembered by many of his companions in the service. After the surrender he returned to his home at Danville in fine health but much depressed in spirits.

The condition into which the country at large, and especially the south, was precipitated just after the war, caused him, as it did many other southerners, to think of seeking a home elsewhere. With this view, he corresponded with some of the ministers in South America. In the meantime he was urged by his old patrons and friends to resume practice, which he finally elected to do, and again opened an office in Danville.

At that time he seemed to engage in his labors with renewed energy and determination. With his characteristic industry he began to collect a library, having lost almost all his books while absent during the war. He gave himself, with undivided attention, to the study and practice of medicine, and very soon his time was fully occupied with business.

About this time he began the study of the French language, and by means of his familiarity with Latin and his studious habits, he was soon able to read and translate with ease, and by continued

practice he became thoroughly acquainted with the language. Having in this way obtained the key to a rich field of literature, he utilized it to great advantage, and became acquainted with the writings of the best medical authors among the French.

His reputation as a physician of superior knowledge and judgment, and as a surgeon of skill and ability, which was so promising at the opening of the war, began now to extend with renewed rapidity. His practice became more extensive, and in difficult and urgent cases in that portion of the state his services as a consultant were sought. With these increasing demands upon his time, he pursued his studies with unflagging interest and perseverance. An essay on trichinosis written about this time and published in the *American Journal of the Medical Sciences*, testifies to his extensive acquaintance with the current medical literature of the day, and to his thorough investigation of complex subjects.

In order to increase his knowledge generally, and to inform himself more thoroughly in certain special departments, he went to the city of New York in the winter of 1869-'70. With his usual energy and attentive observation he followed the leading surgeons and physicians of that great city, and gave particular attention to the study of the diseases of the eye and ear. At this time he was in quite robust health, his mind was very active, and he was rapidly adding to his already good store of professional knowledge. At the same time he made numerous additions to his library, all of which were selected with appreciative taste and judgment.

In the spring he returned to his home and resumed his labors, which in a very short time were quite arduous. The demands for his services became more numerous, and with the extensive reading which he accomplished, duties in the state and county societies, of which he was an active member, and attention to his office pupils, his time was fully occupied. But, like all professional men who accomplish a great deal, he knew how to systematize the time and make use of the minutes.

The writer can testify that most of his essays and clinical reports were written in the intervals between his numerous calls and with constant interruptions. His lucid translations of a number of the valuable clinical lectures of Jaccoud were prepared under similar circumstances.

In order to perfect his professional knowledge, Dr. Jackson

sailed for Europe in May, 1872. He visited England as a delegate from the American Medical Association to the British Medical Association, and attended the meeting of that body in Birmingham. He spent some time in London, visiting hospitals and other places of interest. He visited Edinburgh, Berlin, Vienna and Paris, in which latter city he spent some months in the pursuit of special studies. He made the acquaintance of many of the prominent teachers and practitioners of the Old World, and by personal observation acquainted himself with the most recent advances in medical and surgical science. He returned home late in the autumn, and at once his time was fully occupied with general practice, consultations and operations.

Very soon after his return he translated Farabeuf's Manual on the Ligation of Arteries, and the translation was published by J. B. Lippincott & Co. He next prepared a biographical sketch of Dr. Ephraim McDowell, and brought prominently before the profession the unquestionable claims of the Father of Ovariectomy. He devoted himself with energy and determination to the perpetuation of the memory of this great surgeon, and forcibly presented to the profession the claims of the originator of this grand operation for recognition and respect. Beginning in the Boyle County Medical Society, he pressed these claims on until they were brought before the American Medical Association, and a distinct plan was there adopted for accomplishing the laudable purpose. The existence of the McDowell Memorial Fund, and the other steps being taken to honor the memory of the first ovariectomist, are almost entirely due his labors in this direction.

It was his custom during every winter to refresh his anatomical knowledge by dissections, and to practice the most important surgical operations upon the cadaver, his students participating with him in this important work. He also availed himself of every opportunity to perfect his knowledge of morbid processes by post mortem examination. In the spring of 1873, while engaged in an autopsy, he made some accidental scratches upon a finger, which affected his whole system. He suffered intensely with inflammation of the entire hand and arm, and at one time it seemed that an axillary abscess would result. He was suffering with a severe cold at the time, and was confined to his room with high fever and much pain for some days. He so far improved during the follow-

ing month as to attend the meeting of the American Medical Association in St. Louis, where he contracted additional cold, which was accompanied with severe laryngitis.

He returned home and resumed his practice, although suffering with a cough and thoracic pains, with febrile exacerbations. During the summer he was compelled to discontinue his labors, and to visit the Blue Lick Springs in Kentucky, where he sought to recruit his strength by rest and relaxation from work.

In the fall he again resumed practice, but in the latter part of the winter his physical disorders returned with increased gravity. The laryngitis reappeared in aggravated form, with copious mucopurulent expectoration, pain in the chest and febrile movement.

He attended the meeting of the American Medical Association at Detroit in June, 1874, and his alarming symptoms were so apparent as to attract the anxious attention of his friends in the Association. He was urged to give up work and to seek a restoration of health by rest and other means. He proceeded to New York from Detroit, and sought the advice of the highest authorities on diseases of the chest. By the advice obtained here he discontinued all professional labor, and spent the summer in the North, under circumstances favoring a restoration of his health. He returned home in the fall with his health somewhat improved, but with symptoms of the most alarming nature. It was evident that his lungs were seriously involved.

After some weeks at home, he went to Florida, where he spent the winter in hunting and fishing, remaining in the open air as much as possible. He was much improved in flesh and strength by his stay in Florida, and started home about the middle of April, 1875. While stopping over in Nashville for a few days, from a sudden change in the weather he took a violent cold, which was followed by congestion of the lungs. He was completely prostrated by this stroke, and was confined to his bed for a number of days with high fever and great pain. He arrived at Louisville during the session of the American Medical Association in that city, exhausted and broken down in health.

He was confined to his room during the entire session of the Association. He was visited at his hotel by many distinguished members of the Association, and was the recipient of the most tender attentions from his numerous friends in that body. Reso-

lutions of sympathy for his severe affliction were adopted by the Association, and every possible mark of esteem and respect shown for him. During this meeting he was elected first vice-president of the Association for the ensuing year.

On the 8th of May, attended by a medical friend, he went to Danville. He improved somewhat during the summer months, and spent a great deal of his time in the open air, being able to ride out in pleasant weather. His grave chest troubles continued, and he suffered a great deal with laryngitis and frequent gastrointestinal disturbance. In the fall, although quite feeble, he visited Cincinnati for a few days, and on his return a severe cold was superadded to his troubles, still further reducing his flesh and strength. He bore his severe sufferings with a resignation and heroism unequaled in the observation of the writer.

During the month of November his condition was most serious, and it became evident that the end was very near at hand. He contemplated his approaching dissolution with calmness and without fear. He spoke in touching terms of the dear friends he would leave behind, of the many kindnesses he had received during his illness, and expressed regret at being unable to accomplish certain purposes of his life. He had no fears as to the future, and looking back upon a life devoted to conscientious, self-sacrificing discharge of duty, he accepted the result with resignation. He was in possession of his mental faculties to a remarkable degree up to the time of his death, and foresaw the end almost to a moment. While in a paroxysm of coughing, he died on December 8th, at 3 o'clock, P. M.

In accordance with his request, the funeral was conducted in a plain and unostentatious manner; it was attended by a large number of bereaved persons, and by very many of the medical profession of central Kentucky.

Every mark of affection and esteem which a grateful community and sympathizing profession could offer had been freely tendered during his entire illness, and the sorrow produced by his untimely death was universal and profound.

Expressions of sorrow and of respect were made by the medical organizations which he had adorned, and the medical journals, whose pages he had enriched by his scholarly contributions.

Dying at an age when his influence was most extensive and his

attainments most thorough, we can scarcely estimate the loss which the profession in America has sustained. One who is generally conceded to stand in the first rank of the profession has said of him: "Of noble nature morally, he had more promise of intellectual distinction than any young member of our profession with whom I have come in contact."

Summing up the character, abilities and attainments of Dr. Jackson, he possessed superior talents, extensive learning and practical knowledge, decided ambition, untiring industry, a definite aim in life, a constant devotion to his profession, unity of purpose and action, fidelity to friends and true philanthropy.

One distinguishing trait of his character was his firmness of purpose. When sure that he was in the right, as declared by his judgment, he was incorruptible and uncompromising. He entertained the most supreme contempt for pretense and hypocrisy, and could not endure it in or out of his profession.

As a practitioner of medicine he was courteous and kind, and he was eminently a charitable man. In the sick chamber he was tender and firm, and with great practical knowledge which seemed always at his command, superior judgment, and with a manner inspiring confidence, he exerted an influence for the welfare of his patients which is rarely surpassed.

He performed many of the most important operations in surgery, and as a surgeon he was prompt, deliberate and dextrous. The confidence and admiration he elicited from those who came under his professional care were as wonderful as universal.

As a writer he was clear, concise and elegant. No one can read his essays without being struck with the extent of his information and his intimate acquaintance with the literature of medicine. He was both a rapid and retentive reader, and the facility with which he recalled what he had read was remarkable.

He was a very modest man, and at the same time possessed much spirit and courage. He was quick to resent an insult and very sensitive to any intended slight.

In his relations with his fellow practitioners he was obliging, generous and ethical. So far as can be learned, unethical conduct was never imputed to him, and his high honor and integrity were admitted both by his enemies and his rivals.

It is almost impossible to estimate the value of his services to the medical profession and indirectly to the public of central Kentucky. The Boyle County (Ky.) Medical Society, one of the most efficient and useful organizations in the State, as well as the Central Kentucky Medical Association, owes its organization and present prosperous condition for the most part to his efforts. He was also one of the most energetic and valuable members of the Kentucky State Medical Society.

He never allowed an opportunity for the dissemination of useful knowledge among his brethren around him to pass unimproved, while it was his constant effort to obtain an appreciation of the honorable nature of his calling.

Dr. Jackson was a model preceptor, and prepared his pupils to appreciate to their full extent the lectures upon entering the colleges. He elicited their profound respect and admiration, and his interest in their success was continuous. He imparted instruction to them with scrupulous care by recitations, dissections and demonstrations, and by his own exemplary and upright course taught them medical ethics.

Dr. Jackson was an unmarried man, his social visits were few, and his time was devoted almost exclusively to his profession, which he devotedly loved. His intimate personal friends outside his profession were very few, but by these he was highly appreciated. He was a man of wonderful personal magnetism, and no one capable of appreciating him could come in contact with him without being impressed with his ability. With fine conversational powers, varied and extensive information and gentlemanly deportment, he was a most agreeable companion. In his friendship he was sincere and steadfast under all circumstances.

In personal appearance he was above the medium height, very erect, and rather slender. He had fine bluish-gray eyes, a firm expression about the mouth, and a forehead indicative of great intellect. He was active and energetic in his manner, and neat and plain in his dress. In his habits he was as systematic as a physician in active practice can well be. Whatever he had to do he did at once without delay, and it was by his promptness that he accomplished so much. This habit was the secret of his having time to attend to the duties of medical societies, his correspondence, and other such demands upon his time.

Dr. Jackson had quite a number of compliments paid his talents by the profession. He was a corresponding member of the Gynæcological Society of Boston, an honorary member of the Louisville Obstetrical Society, and of the California State Medical Society. On more than one occasion he was solicited to accept a chair in a medical institution, and in 1874 he was invited to deliver the address before the alumni of the University of Pennsylvania. He was an unassuming man, and was fond of his life as a practitioner in the community which he so ably served.

When we view the character which is imperfectly portrayed here in its entirety, it is then that it can be best appreciated. When we consider the circumstances under which Dr. Jackson began his professional career, the obstacles which were surmounted by his efforts, and the high position to which he attained at an early age, by merit and industry alone, we can realize that he was no ordinary man.

He belonged to that class of men who build their own monuments. No marble shaft is essential to the perpetuation of his memory, which will be green while the present generation lives, and his name will be embalmed with honor in the literature of the profession to which he devoted his noble life.